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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

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DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,564

Applicant(s)

HALSTEAD, ROBERT H.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 12-16, 20, 24-28, 32, 36-40, 44 and 48 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9-11, 17-19, 21-23, 29-31, 33-35, 41-43 and 45-47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6, 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 13-15, 25-27 and 37-39, rejected under 35 U.S.C. 102(e) as being anticipated by David E. Hollingsworth, (hereinafter referred as HW).

1. Claim 1.

A method for processing graphical objects for layout, comprising: HW in abstract discloses the steps of “defining a first graphical object and a second graphical object, the first graphical object having a first size preference and the second graphical object having a second size preference, the first and second size preferences each comprising a size and elastic properties;” see abstract, in the first pass (first graphical object), preferred sizes and elasticities of the graphical objects are computed along a first dimension. In a second pass (second graphical object), size values of the graphical objects along the first dimension are computed from the preferred sizes and elasticities, and preferred sizes and elasticities of the graphical objects along a second dimension are computed based on the size values of the graphical objects along the first dimension. And also HW in abstract discloses that in a final pass, size values of the graphical objects along the second dimension are computed from the preferred sizes and elasticities. “subtracting the second size preference from the first size preference, resulting in a resultant size preference dependent on the

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size preferences of the graphical objects". HW in col. 6, lines 34-35 discloses that other operators, such as "subtract," can also be envisioned. And also see in col. 9, lines 10-11, discloses that an excess (or deficit)  $e$  is computed by subtracting the sum of the two elastics' preferred sizes from  $x$ .  $e$  is apportioned between the two elastics.

2. Claim 2.

"The method of claim 1, further comprising: computing the size of the resultant size preference by subtracting the size of the second size preference from the size of the first size preference."

See rejection of claim 1.

3. Claim 3.

"The method of claim 2, wherein the size of the resultant size preference has a minimum value of zero." HW in col. 7, lines 53-57 discloses that in the physical system, once the highly compressible elastic A had been compressed to zero length (a minimum value of zero), no further compression of A would be possible and the elastic C would then become more difficult to compress, corresponding to B's compress order.

4. Claim 13.

A system for processing graphical objects for layout, comprising: HW in abstract discloses the steps of "a layout processor defining a first graphical object and a second graphical object, the first graphical object having a first size preference and the second graphical object having a second size preference, the first and second size preferences each comprising a size and elastic properties"; see abstract, in the first pass (first graphical object), preferred sizes and elasticities of the graphical objects are computed along a first dimension. In a second pass (second graphical object), size values of the graphical objects along the first dimension are computed

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from the preferred sizes and elasticities, and preferred sizes and elasticities of the graphical objects along a second dimension are computed based on the size values of the graphical objects along the first dimension. And also HW in abstract discloses that in a final pass, size values of the graphical objects along the second dimension are computed from the preferred sizes and elasticities. "the layout processor subtracting the second size preference from the first size preference, resulting in a resultant size preference dependent on the size preferences of the graphical objects", HW in col. 6, lines 34-35 discloses that other operators, such as "subtract," can also be envisioned. And also see in col. 9, lines 10-11, discloses that an excess (or deficit)  $e$  is computed by subtracting the sum of the two elastics' preferred sizes from  $x$ .  $e$  is apportioned between the two elastics.

5. Claim 14.

"The system of claim 13, wherein the size of the resultant size preference is computed by the layout processor subtracting the size of the second size preference from the size of the first size preference". See rejection of claim 13.

6. Claim 15.

"The system of claim 13, wherein the size of the resultant size preference has a minimum value of zero". HW in col. 7, lines 53-57 discloses that in the physical system, once the highly compressible elastic A had been compressed to zero length (a minimum value of zero), no further compression of A would be possible and the elastic C would then become more difficult to compress, corresponding to B's compress order.

7. Claim 25.

A computer program product comprising: a computer-usable medium; HW in abstract discloses the steps of “a set of computer operating instructions embodied on the medium, including instructions for processing graphical objects for layout, comprising instructions for: defining a first graphical object and a second graphical object, the first graphical object having a first size preference and the second graphical object having a second size preference, the first and second size preferences each comprising a size and elastic properties;” see abstract, in the first pass (first graphical object), preferred sizes and elasticities of the graphical objects are computed along a first dimension. In a second pass (second graphical object), size values of the graphical objects along the first dimension are computed from the preferred sizes and elasticities, and preferred sizes and elasticities of the graphical objects along a second dimension are computed based on the size values of the graphical objects along the first dimension. And also HW in abstract discloses that in a final pass, size values of the graphical objects along the second dimension are computed from the preferred sizes and elasticities. “subtracting the second size preference from the first size preference, resulting in a resultant size preference dependent on the size preferences of the graphical objects”, HW in col. 6, lines 34-35 discloses that other operators, such as "subtract," can also be envisioned. And also see in col. 9, lines 10-11, discloses that an excess (or deficit)  $e$  is computed by subtracting the sum of the two elastics' preferred sizes from  $x$ .  $e$  is apportioned between the two elastics.

8. Claim 26.

“The computer program product of claim 25, further comprising instructions for: computing the size of the resultant size preference by subtracting the size of the second size preference from the size of the first size preference”. See rejection of claim 25.

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9. Claim 27.

"The computer program product of claim 26, wherein the size of the resultant size preference has a minimum value of zero", HW in col. 7, lines 53-57 discloses that in the physical system, once the highly compressible elastic A had been compressed to zero length (a minimum value of zero), no further compression of A would be possible and the elastic C would then become more difficult to compress, corresponding to B's compress order.

10. Claim 37.

"A computer data signal embodied in a carrier wave comprising a code segment for processing graphical objects for layout, the code segment comprising instructions for: HW in abstract discloses the steps of "defining a first graphical object and a second graphical object, the first graphical object having a first size preference and the second graphical object having a second size preference, the first and second size preferences each comprising a size and elastic properties; see abstract, in the first pass (first graphical object), preferred sizes and elasticities of the graphical objects are computed along a first dimension. In a second pass (second graphical object), size values of the graphical objects along the first dimension are computed from the preferred sizes and elasticities, and preferred sizes and elasticities of the graphical objects along a second dimension are computed based on the size values of the graphical objects along the first dimension. And also HW in abstract discloses that in a final pass, size values of the graphical objects along the second dimension are computed from the preferred sizes and elasticities. "subtracting the second size preference from the first size preference, resulting in a resultant size preference dependent on the size preferences of the graphical objects". HW in col. 6, lines 34-35 discloses that other operators, such as "subtract," can also be envisioned. And

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also see in col. 9, lines 10-11, discloses that an excess (or deficit)  $e$  is computed by subtracting the sum of the two elastics' preferred sizes from  $x$ .  $e$  is apportioned between the two elastics.

11. Claim 38.

The computer data signal of claim 37, wherein the code segment further comprises instructions for: computing the size of the resultant size preference by subtracting the size of the second size preference from the size of the first size preference", see rejection of claim 37.

12. Claim 39.

"The computer data signal of claim 38, wherein the size of the resultant size preference has a minimum value of zero". HW in col. 7, lines 53-57 discloses that in the physical system, once the highly compressible elastic A had been compressed to zero length (a minimum value of zero), no further compression of A would be possible and the elastic C would then become more difficult to compress, corresponding to B's compress order.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44 and 48 rejected under 35 U.S.C. 103(a) as being unpatentable over David E. Hollingsworth, (hereinafter referred as HW), and in view of common knowledge in the art regarding processing of graphical objects.

13. Claim 4.



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“The method of claim 1, wherein the elastic properties comprise stretch properties and compression properties and further comprising: determining the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the compression properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

14. Claim 8.

“The method of claim 1, wherein the elastic properties comprise stretch properties and compression properties, and further comprising: determining the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference. Official notice is taken that it would have been obvious to one of

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ordinary skill in the art to implement two objects A and B that the stretch properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

15. Claim 12.

“The method of claim 1, wherein the elastic properties comprise stretch properties and compression properties, and further comprising instructions for: adjusting the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement the stretch properties of the resultant size preference to be at least as compliant as the compression properties.

16. Claim 16.

“The system of claim 13, wherein the elastic properties comprise stretch properties and compression properties; and the layout processor determining the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and

Stretchiness properties, but does not explicitly specify the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the compression properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

17. Claim 20.

“The system of claim 13, wherein the elastic properties comprise stretch properties and compression properties; and the layout processor determining the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the stretch properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

18. Claim 24.

“The system of claim 13, wherein the elastic properties comprise stretch properties and compression properties; and the layout processor adjusting the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size

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preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement the stretch properties of the resultant size preference to be at least as compliant as the compression properties.

19. Claim 28.

“The computer program product of claim 25, wherein the elastic properties comprise stretch properties and compression properties and further comprising instructions for: determining the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference”, HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the compression properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

20. Claim 32.

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“The computer program product of claim 25, wherein the elastic properties comprise stretch properties and compression properties, and further comprising instructions for: determining the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference”, HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the stretch properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

## 21. Claim 36.

“The computer program product of claim 25, wherein the elastic properties comprise stretch properties and compression properties, and further comprising instructions for: adjusting the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference.

Official notice is taken that it would have been obvious to one of ordinary skill in the art to

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implement the stretch properties of the resultant size preference to be at least as compliant as the compression properties.

22. Claim 40.

“The computer data signal of claim 37, wherein the elastic properties comprise stretch properties and compression properties and the code segment further comprising instructions for: determining the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference”.

HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the compression properties of the resultant size preference from the compression properties of the first size preference and the stretch properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the compression properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

23. Claim 44.

The computer data signal of claim 37, wherein the elastic properties comprise stretch properties and compression properties, and the code segment further comprising instructions for: determining the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference”, HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the

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elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference from stretch properties of the first size preference and compression properties of the second size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement two objects A and B that the stretch properties of the first size (object A) preference and the stretch properties of the second size (object B) preference.

24. Claim 48.

“The computer data signal of claim 37, wherein the elastic properties comprise stretch properties and compression properties, and the code segment further comprising instructions for: adjusting the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference”. HW in col. 1, lines 64-67 discloses that elasticity of each graphical object may be defined by separate stretchiness and compressibility coefficients”. HW in col. 26, lines 16-19 discloses that the elasticity includes compression and Stretchiness properties, but does not explicitly specify the stretch properties of the resultant size preference to be at least as compliant as the compression properties of the resultant size preference. Official notice is taken that it would have been obvious to one of ordinary skill in the art to implement the stretch properties of the resultant size preference to be at least as compliant as the compression properties.

*Allowable Subject Matter*

Claims 5-7, 9-11, 17-19, 21-23, 29-31, 33-35, 41-43 and 45-47 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Examiner's reasons for claims 5,9,17,21,23,29,33,41 and 45: setting the compression/stretch properties of the resultant size preference equal to the stretch/compression properties of the second size preference if the compress/stretch order of the first size preference is less than the stretch/compress order of the second size preference.

Examiner's reasons for claims 6,10,18,22,30,34,42 and 46: setting the compression/stretch properties of the resultant size preference equal to the stretch/compression properties of the first size preference if the stretch/compress order of the first size preference is greater than the stretch order of the second size preference.

Examiner's reasons for claims 7,11,23,31,35,43 and 47: setting the compressibility/stretchiness coefficients of the resultant size preference equal to the sum of the stretchiness/compressibility coefficients of the first size preference and the stretchiness/compressibility coefficient of the second size preference if the compress/stretch order of the first size preference is equal to the stretch/compress order of the second size preference.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-746-8705.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini  
Examiner  
Art Unit 2672

Javid Amini

*Jeffery A. Biner*  
JEFFERY BINER  
PRIMARY EXAMINER